TERANTY LiPo Battery Universal Manual

Applicable Models: 7.4V / 11.1V / 14.8V / 22.2V LiPo Batteries (2S / 3S / 4S / 6S)

1. Product Overview

TERANTY LiPo batteries are high-performance lithium-polymer batteries designed for RC models, drones, FPV, and other high-discharge electronic devices. They offer high energy density, stable discharge performance, and reliable power output, making them ideal for demanding applications.

2. Specifications (Typical Values)

Voltage (S Count)	Nominal Voltage	Full Charge Voltage	Cut-off Voltage	Discharge Rate	Capacity Range
2S (7.4V)	7.4V	8.4V	6.0V	25C – 100C	1500 – 15000mAh
3S (11.1V)	11.1V	12.6V	9.0V	25C – 100C	1500 – 15000mAh
4S (14.8V)	14.8V	16.8V	12.0V	25C – 100C	1500 – 15000mAh
6S (22.2V)	22.2V	25.2V	18.0V	25C – 100C	1500 – 15000mAh

Connector Options: XT60, XT90, JST, Deans T-Plug, etc. (depending on model)

Balance Lead: JST-XH / JST-EH balance connector for safe charging

3. Key Features

- **High Energy Density**: Lightweight design with high capacity for extended flight/run time.
- **Stable Discharge**: Consistent voltage output under high load, suitable for high-performance models.
- **Multiple Voltage Options**: Available in 2S/3S/4S/6S configurations to match different devices.
- **Durable Construction**: Reinforced casing and internal structure to withstand vibration and impact.
- **Safety Protection**: Built-in safeguards against overcharge, over-discharge, and short circuits (when used with proper chargers/ESCs).

4. Charging Instructions

1. **Use a LiPo-specific balance charger**: Never use a non-LiPo charger, as this can cause fire or explosion.
2. **Balance charging**: Always connect both the main discharge lead and the balance lead to the charger. Do not charge without balancing.
3. **Charge rate**: Follow the manufacturer’s recommendation (typically 1C, e.g., 6000mAh → 6A). Avoid fast charging (>1C) unless the battery is explicitly rated for it.
4. **Charge in a safe area**: Charge on a fireproof surface (LiPo bag, concrete, metal) and never leave unattended.
5. **Temperature check**: Do not charge if the battery is hot (>45° C). Allow it to cool to room temperature first.
6. **Full charge voltage**:
   2S: 8.4V
   3S: 12.6V
   4S: 16.8V
   6S: 25.2V

5. Discharge & Usage Instructions

1. **Do not over-discharge**: Never let the battery voltage drop below the cut-off voltage (per cell: 3.0V). Use a low-voltage alarm or ESC with LVC.

2. **Discharge rate**: Do not exceed the rated C-rate (e.g., 60C continuous discharge).
3. **Storage voltage**: For long-term storage (more than 2 weeks), discharge/charge the battery to**3.8 – 3.85V per cell**(storage charge mode on your charger).
4. **Check for damage**: Before use, inspect the battery for swelling, punctures, or leaking. Do not use damaged batteries.
5. **Temperature during use**: Avoid operating the battery in extreme heat (>60° C) or cold (<0° C). Allow it to cool after use before recharging.

6. Safety Precautions

WARNING: Improper use of LiPo batteries can cause fire, explosion, or injury. Always follow these rules:

- Never short-circuit the battery terminals.
- Do not puncture, crush, or incinerate the battery.
- Keep away from children and pets.
- Do not charge or use a swollen, damaged, or leaking battery.
- Store in a cool, dry place, away from flammable materials.
- If a battery catches fire, use a Class D fire extinguisher or sand. Do not use water.

7. Storage & Maintenance

- **Short-term storage**: Store at room temperature (20 – 25° C) in a fireproof container.
- **Long-term storage**: Maintain storage voltage (3.8 – 3.85V/cell) and check voltage every 3 months.
- **Cleaning**: Wipe the battery casing with a dry cloth. Do not use water or chemicals.
- **Disposal**: Dispose of LiPo batteries at a certified recycling center. Do not throw in regular trash.

8. Warranty & Disclaimer

- This product is covered under warranty against manufacturing defects.

- Damage caused by improper use, overcharging, over-discharging, or physical damage is not covered.
- TERANTY is not liable for any injury, damage, or loss caused by improper use of the battery.